City of Evanston

Utilities Department
555 Lincoln Street
Evanston, Illinois 60201
T 847.448.4311
TTY 847.448.8064
www.cityofevanston.org

July 21, 2015

John Therriault
Clerk of the Board
James R. Thompson Center
100 West Randolph Suite11-500
Chicago, IL 60601

RE: City of Evanston Petition for Variance for Chloride Regulations in the Chicago Area Waterways System

To Whom It may Concern:

The City of Evanston ("Evanston"), pursuant to Section 35(a) of the Illinois Environmental Protection Act ("Act"), 415 ILCS 5/35(a), and Part 104 of Title 35 of the Illinois Administrative Code, 35 Ill. Admin. Code § 104.100 et seq., hereby petitions the Illinois Pollution Control Board ("Board") for a variance authorizing discharges from the Combined Sewer Overflow ("CSO") and Municipal Separate Storm Sewer System ("MS4") outfalls into the Chicago Area Waterways System ("CAWS") pursuant to the terms and conditions outlined in this Petition for Variance ("Petition").
In Docket 2008-009, the Board has been engaged in an extensive rulemaking process regarding designated uses, effluent limitations and water quality standards for the CAWS. Subdocket D has involved the setting of water quality standards for the protection of aquatic life. The Board has now adopted final aquatic life water quality standards for the CAWS, effective July 1, 2015. (39 Ill. Reg. 9388, 9423, 9433 (July 10, 2015)) Included in that rulemaking are new standards for chlorides.

During the rulemaking, it was noted that most reaches of the CAWS are not currently meeting the new chlorides standards. It is the understanding of Evanston that the Board has granted a delay in the implementation of the new chlorides standards for the Metropolitan Water Reclamation District ("MWRD") until July 1, 2018. Evanston is requesting a similar Petition for Variance for all CSO and MS4 outfalls into CAWS.

REQUIREMENTS FROM WHICH A VARIANCE IS SOUGHT

As noted above, the Board has adopted new aquatic life standards for the CAWS, including for chlorides. These standards were adopted by an Opinion and Order of the Board in Docket R2008-09, Subdocket D, dated June 18, 2015. The final rules appeared in the Illinois Register on July 10, 2015 (30 Ill. Reg. 9388, 9423, 9433). The

chlorides standards, which are in 35 IAC 302.407(g)(2) and (g)(3), are not currently met on a consistent basis and cannot be met on a consistent basis during the term of the variance that is being requested here by Evanston.

LOCATIONS OF POINTS OF DISCHARGE

Evanston has 13 points of combined sewer discharge regulated by the NPDES permit and 15 points of storm sewer discharge regulated by the MS4 permit. These discharges enter the North Shore Channel. The nearest air monitoring stations are unknown and not relevant for the requested variance. These points are shown in the table below.

Outfall No.	Location/Description	CSO / Storm Sewer
O03	**Asbury** extended south of Lincoln Street. 36" CS discharges to 54" MWRD interceptor on west side of Channel. Visible from Lincoln Street bridge.	CSO
A04	**Green Bay Road**. 120" RS constructed by McNally. Discharges to controlled Dropshaft # 109S. Visible from old Permalawn Site.	CSO
O05	**Bridge Street**, under bridge on north side. 20"CS. Discharges to un-controlled Dropshaft #106. Visible from west side of bridge.	CSO
O06	**Elgin Road**, on west side of Channel. 60" CS (lined). Discharges to controlled Dropshaft #107. Visible from Emerson Street bridge.	CSO
A06	**Elgin Road**, on west side of Channel. 120" RS constructed by McNally. Discharges to controlled Dropshaft #107. Visible from Emerson Street bridge.	CSO
A07	**Emerson Street**, on east side of Channel. 36" RS. Discharges to un-controlled Dropshaft #108 visible from Emerson Street bridge.	CSO
A08	**Lake Street**, behind D65Admin. Bldg. 108" RS constructed by Shea. Discharges to controlled Dropshaft #106. Visible from Skokie sculpture park.	CSO
O09	**Greenleaf Street.** 60"CS. Discharges to controlled Dropshaft #105. Visible from Main Street Bridge.	CSO
O10	**Main Street**, east side. 21" CS, submerged diverted to MWRD interceptor. Visible from Main Street bridge.	CSO
A10	**Main Street**, east side 120" RS constructed by Marino. Discharges to controlled Dropshaft #104E. Visible from Main Street bridge.	CSO
O11	**Cleveland Street.** 54" CS. Discharges to un-controlled Dropshaft #103. Visible from Skokie sculpture park.	CSO

Outfall No.	Location/Description	CSO / Storm Sewer
O13	**Mulford Street.** 60" CS. Discharges to uncontrolled Dropshaft #101. Visible from west side of Channel.	CSO
A13	**Mulford Street**. 72" RS. Discharges to un-controlled Dropshaft #101, visible from west side of Channel.	CSO
S01	Isabella St – East (60")	Storm Sewer
S02	Isabella St – West (12")	Storm Sewer
S03	Central St – West (24")	Storm Sewer
S04	Lincoln St – East (12")	Storm Sewer
S05	Lincoln St – West (42")	Storm Sewer
S06	Bryant Ave – East (42")	Storm Sewer
S07	Jackson Ave – West (36")	Storm Sewer
S08	Poplar Ave – West (48")	Storm Sewer
S09	Dodge Ave – West (36")	Storm Sewer
S10	Bridge St – West (54")	Storm Sewer
S11	Bridge St – East (54")	Storm Sewer
S12	Simpson St – West (30")	Storm Sewer
S13	Martha Ln – West (24")	Storm Sewer
S14	Greenleaf St – East (30")	Storm Sewer
S15	Cleveland St – East (60")	Storm Sewer

IDENTIFICATION OF PRIOR VARIANCES ISSUED TO PETITIONER CONCERNING SIMILAR RELIEF

There have been no variances issued to Evanston concerning similar relief.

IDENTIFICATION OF THE ENVIRONMENTAL PERMITS HELD BY PETITIONER FOR THE ACTIVITY WHICH MAY BE AFFECTED BY THE GRANT OF VARIANCE

The following permits held by Evanston would be affected by the grant of the requested variances:

City of Evanston Combined Sewer Overflow
NPDES Permit No. ILM580002

City of Evanston Storm Water
NPDES Permit No. ILR400335

NUMBER OF PERSONS EMPLOYED BY THE PETITIONER'S FACILITY AT ISSUE AND THE AGE OF THAT FACILITY

Evanston has a total of 730 full-time employees. Fourteen employees work in sewer system operations.

Evanston does not operate a wastewater treatment facility; collected wastewater is transmitted to the O'Brien Water Reclamation Plant operated by MWRD. The combined sewer collection operated by Evanston began construction in the 1850's. The majority of the system is over 100 years old.

The storm sewer system operated by Evanston began construction in the 1980's.

NATURE AND AMOUNT OF MATERIALS USED IN THE ACTIVITY FOR WHICH A VARIANCE IS SOUGHT AND A FULL DESCRIPTION OF THE PARTICULAR ACTIVITY IN WHICH THE MATERIALS ARE USED

The CSO outfalls provide relief from local flooding during heavy wet weather events due to the finite hydraulic capacity of MWRD's ability to receive wastewater. The MS4 outfalls discharge stormwater runoff collected as part of the normal operations of the storm sewer system.

Chlorides are primarily generated through the public and private use of salt for control of snow and ice during winter storm events. Use of a minimum amount of salt for this purpose is considered critical for public safety.

DESCRIPTION OF THE RELEVANT POLLUTION CONTROL EQUIPMENT ALREADY IN USE

The combined and storm sewer systems control pollution through the use of drainage structures with catch basins that remove the majority of the solids. Street sweepers are utilized to remove debris from the streets before it is washed into the sewer system during rain events.

NATURE AND AMOUNT OF EMISSIONS, DISCHARGES OR RELEASES OF THE CONSTITUENT IN QUESTION CURRENTLY GENERATED BY PETITIONER'S ACTIVITY

Evanston does not have a North Shore Channel sampling program, and it is not the primary discharger to this waterway.

REASON COMPLIANCE WITH THE REGULATION CANNOT BE ACHIEVED BY THE COMPLIANCE DATE

Any chlorides in Evanston's discharge to the North Shore Channel through CSO's and storm outfalls is generated through two sources:

1. Chlorides occurring in the source water used by Evanston residents and discharged into the combined sewer system
2. Salt used for snow and ice control during winter storm events, necessary for public safety.

Evanston is currently operating a robust program to minimize the use of salt and generation of chlorides. This includes: applying salt to arterial streets only (residential streets are only plowed, not salted), use of prewetting and brine to reduce the amount of salt needed to effectively de-ice the roadways, and use of agricultural byproducts (such as beet juice) to increase the effectiveness of salt, reducing the total amount needed. In order to remove the chlorides from all discharges prior to entering the North Shore Channel, it would be necessary to provide Reverse Osmosis (RO) treatment to all runoff prior to discharge from the collection system. Construction of these facilities is not practical.

EFFORTS NECESSARY TO ACHIEVE IMMEDIATE COMPLIANCE

Compliance efforts to date have been primarily through implementing Best Management Practices ("BMPs") related to snow and ice control. This has not been completely effective in controlling chloride levels in the North Shore Channel, although Evanston is not the primary discharger to this waterway.

ARBITRARY OR UNREASONABLE HARDSHIP

As explained above, immediate compliance with the new chlorides standards is simply not possible. Treatment of stormwater discharges is not currently practical. No infrastructure has been put in place to centralize the collection of these discharges, and construction of RO facilities to treat all stormwater runoff generated within Evanston would be so costly as to impose an arbitrary and unreasonable hardship. Elimination of all public and private salt use during winter storm events would create a public safety problem and be similarly arbitrary and unreasonable.

In addition, Evanston is not the primary discharger to this waterway, so it is unlikely that efforts by Evanston will have a significant impact on the overall chloride levels.

COMPLIANCE PLAN AND SUGGESTED CONDITIONS

Evanston proposes working with area communities and the MWRD to promote BMPs related to salt use for snow and ice control. MWRD has convened a CAWS chlorides Work Group, which Evanston will work with to implement area-wide BMPs. The initial Work Group time frame is proposed for the next three years.

ENVIRONMENTAL IMPACT

Immediate compliance with the new chloride standards is not possible. Continual implementation of BMPs can reduce the amount of salt use per inch of snowfall, but total chlorides will still be heavily dependent on the total annual snowfall. Since Evanston is not the primary discharger to this waterway, it is not possible to determine the environmental impact related to the continuation of the use of BMPs.

BEGINNING AND END DATE OF THE VARIANCE

Evanston proposes the variance to begin effective immediately. Since construction of treatment facilities is not practical, Evanston does not propose an end date to the variance.

CONSISTENCY WITH FEDERAL LAW

The requested variances in this matter will be consistent with federal law. More specifically, the variance must meet one or more of the conditions in 40. C.F.R. § 131.10(g) which provides:

> (g) States may remove a designated use which is not an existing use, as defined in Sec. 131.3, or establish sub-categories of a use if the State can demonstrate that attaining the designated use is not feasible because:
>
> (1) Naturally occurring pollutant concentrations prevent the attainment of the use; or
>
> (2) Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating State water conservation requirements to enable uses to be met; or
>
> (3) Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place; or
>
> (4) Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use; or
>
> (5) Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses; or
>
> (6) Controls more stringent than those required by sections 301(b) and 306 of the Act would result in substantial and widespread economic and social impact.

Under the circumstances here, there are natural conditions, human-caused conditions, hydrologic modifications, and physical conditions as to the CAWS that will prevent attainment of the use during the time period covered by this variance. Therefore, the variance would be justified pursuant to 131.10(g)(2), (g)(3),(g)(4) and (g)(5).

WAIVER OF REQUEST FOR HEARING
Evanston requests that a hearing be held in this matter.

Thank you for your consideration of the this matter. Please contact me at (847)448-8213 if you have any further questions.

Sincerely,

David D. Stoneback
Director